	Application No.	Applicant(s)
Notice of Allowability	09/973,069	ANDERSSON ET AL.
	Examiner	Art Unit
	Kuen S. Lu	2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _August 5, 2005_.

2. ☒ The allowed claim(s) is/are _31-38_.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

       1. ☒ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _10/21/2005_ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

After a thorough search and examination of the present application and in light of the prior art made of record, Applicant's response of August 5, 2005, and the Examiner's Amendments of October 11, 2005, Claims 31-38 are allowed.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview Mr. John P. DeLuca (Registration #: 25,505), on October 21, 2005. The amended claims are listed below:

31. (Currently Amended) A method for automatic control of real world entities ~~that may be controlled~~ by a computerized control system, wherein the entities are represented as instances of objects, and wherein the control of an individual entity depends on the relationship of the entity to other entities, the method comprising the steps of:

creating at least two structures, wherein each structure is based on a certain type of relationship between object instances;

creating at least one composite object type comprising at least two formal instances, wherein each formal instance contains information about instantiation of a certain

object type and the at least one composite object describes by means of formal

instances how to arrange object instances in data structures that are not in the same

class hierarchy, and wherein at least one such object type defines a function for control

of an entity;

   locating each formal instance in at least one of two groups of formal instances, wherein

each group is associated with a structure, and at least two groups are associated with

different structures;

   instantiation of the composite object type, wherein for each group of formal instances

corresponding real world object instances are created and located in the structure with

which the group is associated; and

   automatically changing at least one object instance thus created, said object instance

defining a function for control of a   entity, such that said function for control is adapted

to the relationship of the object instance to other object instances in at least one of the

resultant structures such that the control of the corresponding entity is adapted to the

relationship of said entity to other entities.

36. (Currently Amended) A system for automatic control of real world entities that may

be controlled by a computerized control system, wherein the entities are represented as

instances of objects, and wherein the control of an individual entity depends on the

relationship of the entity to other entities, the system comprising:

   at least two structures, wherein each structure is based on a certain type of relationship

between object instances;

composite object types comprising at least two groups of formal instances, wherein

each group is associated with a structure, and wherein each formal instance contains

information about instantiation of a certain object type and the at least one object type

describes by means of formal instances how to arrange object instances in data

structures that are not in the same class hierarchy, and wherein at least one such object

type defines a function for control of an entity;

automatic functions which, when the composite object type is instantiated, for each

group of formal instances create corresponding real world instances and locate these in

the structure with which the group is associated, and change at least one object

instance, thus created, which defines a function for control of an entity, such that said

function for control is adapted-to the relationship of the object instance to other object

instances in at least one of the structures in which the object instance is located, the

control of the corresponding entity thus being adapted to the relationship of said entity

to other entities.

Reason for Allowable

4. In the Examiner's Office Action for Final Rejection of February 10, 2005, 35 U.S.C.

35 U.S.C. § 102, rejections was based on the primary reference, Endicott et al. (U.S.

Patent 5,404,525, "EFFICIENT METHOD ROUTER THAT SUPPORTS MULTIPLE

SIMULTANEOUS OBJECT VERSIONS", hereafter "Endicott"). In the response filed on

May 11, 2005, the Applicant argued that the object structures are the fundamental part

of the method of the application and the object structures organize object instances, not

the object classes. Endicott teaches various data structures as a way to locate objects, interfaces and methods, remaining within the realm of traditional object data structures. Endicott does not teach said object structures for organizing object instances, which are unlike traditional object class hierarchies.

Furthermore, the Applicant agreed to further narrow and amend the scope of each independent, as filed on May 11, 2005.

The Examiner also initiated a telephone interview for obtaining an authorization from the Applicant to amend independent claims 31 and 36 by removing a "may be controlled" clause for avoiding a potential *Claim Rejections by 35 USC § 112*, second paragraph.

After a further review of the above consideration and an update search conducted as described below, the claims 31 and 36, as lastly amended on October 21, 2005, is hereby considered and accepted.

A search for the prior arts on EAST database has been recently conducted to further extend and update the scope the searches conducted during the past one and half years on domains (EAST, NPL-ACM, Google, NPL-IEEE, Oracle, Sun Micro, etc.). The prior arts searched and investigated in domains (EAST, NPL-ACM, Google, NPL-IEEE, Oracle, Sun Micro, etc) do not fairly teach or suggest the teaching of the combined elements as claimed in the independent claims 31 and 36.

The dependent Claims 32-35 and 37-38, depending claims 31 and 36, respectively, also distinct from the prior art for the same reason.

5. Any comments considered necessary by Applicants must be submitted no later than

the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance".

Contact Information

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-

4114. The examiner can normally be reached on Monday-Friday (8:30 am-5:30 pm).

If attempts to reach the examiner by telephone pre unsuccessful, the examiner's

supervisor, Jean R. Homere, Esq. can be reached on (571) 272-3780. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for Page 13

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact he Electronic

Business Center (EBC) at 886-217-9197 (toll-free).

Kuen S. Lu,   Patent Examiner,   October 26, 2005